AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (currently amended)   A method of retrieving channel characteristics ~~for~~ of a discrete multi-tone communication channel having a plurality of bins, comprising the steps of:

~~at initialization,~~ determining and storing on a per bin basis channel frequency response and noise measurements at a ~~CO~~ first end of the channel at initialization;

~~at show time,~~ determining and storing a signal-to-noise measurement on a per bin basis at ~~said~~ the first end at show time;

~~at a CPE end of the channel,~~ retrieving ~~at least one of~~ the stored channel frequency response, noise and signal-to-noise measurements at a second end of the channel; and

receiving data at the ~~CPE~~ second end at a rate in dependence upon ~~the one or more of~~ the retrieved measurements ~~measurement~~.

2.   (currently amended) A method as claimed in claim 1 wherein the ~~channel is symmetrical~~ first end comprises a central office (CO) end, and the second end comprises a customer premise equipment (CPE) end.

3.   (original)   A method as claimed in claim 1 wherein the channel is asymmetrical.

4.   (currently amended) A method as claimed in claim 1 wherein the first end comprises a customer premise equipment (CPE) end, and the second end comprises a central office (CO) end. ~~the channel is overlapping.~~

5.   (original)   A method as claimed in claim 1 wherein the channel is non-overlapping.

6.   (currently amended)   A method as claimed in claim 1 wherein the channel is an Asymmetric Digital Subscriber Line (ADSL) channel.

7.   (currently amended) A method as claimed in claim 1 wherein the channel comprises a very high bit-rate DSL (VDSL) channel~~noise is N(f)~~.

8. – 9.   (cancelled)

10.   (currently amended) An apparatus for retrieving channel characteristics ~~for~~ of a discrete multi-tone communication channel having a plurality of bins, the apparatus comprising:

        a first circuit for ~~at initialization,~~ determining and storing on a per bin basis channel frequency response and noise measurements at a ~~CO~~ first end of the channel at initialization;

        a second circuit for ~~at show time,~~ determining and storing a signal-to-noise measurement on a per bin basis at the first end at show time;

        a ~~circuit~~ first receiver for ~~at a CPE end of the channel,~~ retrieving ~~at least one~~ ~~of~~the stored frequency response, noise and signal-to-noise measurements at a second end of the channel; and

        a ~~circuit~~ second receiver for ~~transmitting~~ receiving data ~~to the CPE end~~ at a rate in dependence upon the retrieved measurements at the second end.

11.   (currently amended) An apparatus as claimed in claim 10 wherein the first end comprises a central office (CO) end, and the second end comprises a customer premise equipment (CPE) end. ~~channel is symmetrical.~~

12.   (original)   An apparatus as claimed in claim 10 wherein the channel is

asymmetrical.

13.   (currently amended) An apparatus as claimed in claim 10 wherein the first end comprises a customer premise equipment (CPE) end, and the second end comprises a central office (CO) end ~~channel is overlapping~~.

14.   (original)   An apparatus as claimed in claim 10 wherein the channel is non-overlapping.

15.   (currently amended) An apparatus as claimed in claim 10 wherein the channel is an Asymmetric Digital Subscriber Line (ADSL) channel.

16.   (currently amended) An apparatus as claimed in claim 10 wherein the channel is a very high bit-rate DSL (VDSL) channel.

17. – 30.   (cancelled)

31.   (new) A computer readable medium containing program instructions for retrieving channel characteristics of a discrete multi-tone communication channel having a plurality of bins, comprising the steps of:

        determining and storing on a per bin basis channel frequency response and noise measurements at a first end of the channel at initialization;

        determining and storing a signal-to-noise measurement on a per bin basis at the first end at show time;

        retrieving the stored channel frequency response, noise and signal-to-noise measurements at a second end of the channel; and

        receiving data at the second end at a rate in dependence upon the retrieved measurement.

32.   (new) A computer readable medium as claimed in claim 31, wherein the first end comprises a central office (CO) end, and the second end comprises a customer premise equipment (CPE) end.

33.   (new)   A computer readable medium as claimed in claim 31 wherein the channel is asymmetrical.

34.   (new) A computer readable medium as claimed in claim 31 wherein the first end comprises a customer premise equipment (CPE) end, and the second end comprises a central office (CO) end.

35.   (new)   A computer readable medium as claimed in claim 31 wherein the channel is non-overlapping.

36.   (new)   A computer readable medium as claimed in claim 31 wherein the channel comprises an Asymmetric Digital Subscriber Line (ADSL) channel.

37.   (new) A computer readable medium as claimed in claim 31 wherein the channel comprises a very high bit-rate DSL (VDSL) channel.